

## **REMARKS/ARGUMENTS**

The Office Action dated March 21, 2011 has been carefully reviewed. Reconsideration of the objections and rejections contained therein is respectfully requested in view of the following remarks. Claims 58-63, 65-74, 76-85, 87-96, 98-105, and 107-119 are pending in the application.

### ***Claim Rejections – 35 USC § 103***

Claims 58-59, 62-63, 66-68, 70, 73-74, 77-79, 81, 84-85, 88-90, 92, 95-96, 99-101, 103-104, and 108-118 are rejected under 35 USC § 103 as being unpatentable over Sanmugam (US 5,533,094) in view of Miah et al. (EP 1217855 A1, “Miah”). Claims 60, 71, 82, 93, and 105 are rejected under 35 USC § 103 as being unpatentable over Sanmugam in view of Miah as applied to claims 59, 70, 81, and 92 above, and further in view of Palat et al. (US 6,765,890 B1, “Palat”). Claims 61, 72, 83, and 94 are rejected under 35 USC § 103 as being unpatentable over Sanmugam in view of Miah as applied to claims 59, 70, 81, and 92 above, and further supported by Wallentin et al. (US 6,834,191 B2, “Wallentin”). Claims 65, 76, 87, 98, and 107 are rejected under 35 USC § 103 as being unpatentable over Sanmugam in view of Miah as applied to claim 109, 110, 111, 112, and 115 above, and further in view of Laroia et al. (US 6,823,191 B2, “Laroia”). Claims 69, 80, 91, and 102 are rejected under 35 USC § 103 as being unpatentable over Sanmugam in view of Miah as applied to claim 109, 110, 111, and 112 above, and further in view of Weber et al. (US 6,314,282, “Weber”). Claim 119 was rejected under 35 U.S.C. 103(a) as being unpatentable over Sanmugam in view of Miah as applied to claims 70 and further in view of Melpignano et al. (hereinafter Melpignano) (US 7,193,991). Applicants respectfully traverse each of these rejections at least for the following reasons.

### ***Reply to Examiner's Response to Arguments***

Since the Examiner has maintained the prior rejections and has provided arguments in support of this position, Applicant will address the Examiner's response first.

On page 24, the Examiner replies that “applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually”. However, the Applicants have not argued against the references individually, but instead have pointed out

the deficiency of the reference relied upon by the Examiner. Specifically, the Applicants have argued that the Sanmugam reference fails to teach “determining a level of quality of service for a paging message by receiving and analyzing paging information at a paging requirements determination module within an access node; and allocating paging resources and generating the paging message from a paging resource control module within the access node in accordance with the level of quality of service determined by the paging requirements determination module” (with emphasis added), as alleged by the Examiner. This is not attacking the references individually as the Miah reference was not even alleged to teach this aspect, so the combination is irrelevant for this feature. Further, each of the cited references relates to a centralized paging system, wherein any analysis of paging information is performed at a centralized node, rather than at the access node.

The Examiner goes on to allege on page 25 that “paging orders are transmitted towards the base station (e.g., 256) and places the page message(s) in buffers of the base stations in which the page message(s) are transmitted according to paging priorities (see col. 12, lines 29-40), where the base station (e.g., 256) determines what the paging priorities are in order to allocate resources to distribute the paging messages appropriately” (with emphasis added). Applicants have provided specific arguments in the past relying on the actual teachings of Sanmugam which discloses the following Fig. 9 (provided below) and discloses no specific activity at BS 256, as can clearly be seen below.

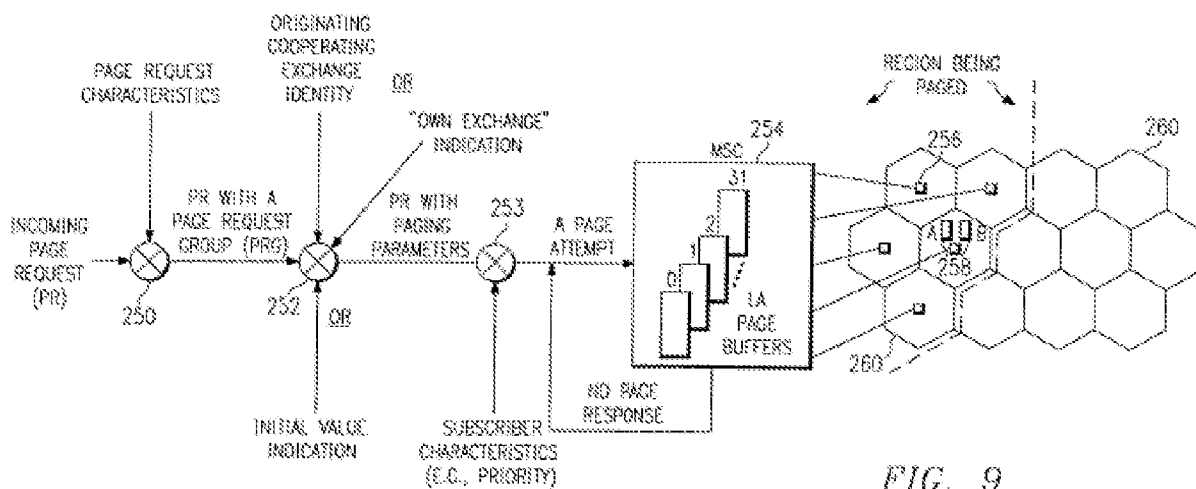


FIG. 9

This is further emphasized in the cited portion (column 13, lines 1-32) relied upon by the Examiner, where Sanmugam provides the following (with emphasis added).

At node 250, the system accepts an incoming page request along with its particular characteristics and determines the designation of a page request group. The page request, along with its associated page request group designation, proceeds to node 252 at which the system determines whether the identity of the cooperating exchange from which the page request originated is available. If not, the system will retrieve the paging parameters defined to serve the "Own Exchange." If the identity of the cooperating exchange is available, the system will either retrieve the paging parameters defined for that particular originating cooperating exchange or retrieve preselected default values supplied by the system if paging parameters have not been defined for that particular cooperating exchange. The page request and its associated paging parameters proceeds to node 253 where the paging parameters are combined with the subscriber characteristics, such as subscriber priority, and becomes a page attempt which is transmitted to the **MSC 254** and placed in the paging buffers associated with the appropriate location areas. There is one buffer for each location area. The MSC 254 then transmits the page attempt from each of the appropriate buffers to their associated location areas 260 within the region being paged. These page attempts are sent to each base station 256 within each location area 260. At each control channel, there are two buffers 258, stream A and stream B, which are utilized to place the page attempts into the control channel (FOCC) for broadcast according to the assigned page attempt priorities. The MSC 254 enters and remains in a state of waiting for a page response from the time a page order is sent to the base stations. If no page response is received within a designated time period the MSC 254 will reset itself and await new page attempts.

As is clearly indicated in the foregoing sections, Sanmugam system "determines the paging requirements" (e.g., subscriber priority) at **node 253** prior even to MSC 254. Accordingly, Applicants respectfully submit that "determining a level of quality of service for a paging message by receiving and analyzing paging information at a paging requirements determination module within an access node", as recited in claim 70.

As noted above, in the Office Action on page 25, the Examiner refers to col. 12, lines 29-40 as allegedly teaching that the base station 256 "determines what the paging priorities". However, Sanmugam discloses in col. 12, lines 29-40 (with emphasis added) that base station 256 merely *buffers* the pages based on the priority already determined.

At 208, paging orders are transmitted towards the base stations carrying the associated paging priorities. Thereafter, at 210, and at the control channel within the base station, the page message is placed in one of two buffers, either "Stream A" or "Stream B," according to the paging priority. The particular buffer is selected depending on the least significant bit of the identification number (even or odd) of the mobile stations being paged. Next, at 212, the control channel selects

from the Stream A/Stream B buffers the higher priority page messages before the lower priority page messages and broadcasts the page message for the sought after mobile into the system.

As clearly indicated in the foregoing, the “paging orders are transmitted towards the base stations **carrying the associated paging priorities**”, therefore it is expressly taught by Sanmugam that the paging priorities are already determined *before* they are forwarded to the base stations.

Applicants’ respectfully submit that the Examiner has failed to appreciate the express teachings of Sanmugam in this regard. Further, any alleged modification of Sanmugam to include aspects of Applicants’ claimed combinations would be based solely on impermissible hindsight and would at the very least change the principle of operation of Sanmugam.

As stated in MPEP § 2143.01, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). Further, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). Accordingly, even if the Examiner alleges that the prior art can be combined to modify the Sanmugam system (which Applicants do not concede), Applicants’ respectfully submit that any such modification would change the principle of operation of Sanmugam (i.e., decentralizing the paging prioritization, changing the functionalities of node 253 and base stations 256, etc.). Accordingly, any such attempt at modification is “not sufficient to render the claims *prima facie* obvious”, as noted in the foregoing decisions.

In the prior response, Applicants noted that claim 110 recites “exchanging paging information between a plurality of access nodes...determining the level of quality of service at least in part (i) from analyzing at least one of a header field or a payload field, using a packet classification technique, from a received data message and (ii) from stored information uniquely associated with the access node in which the paging requirements determination module resides.” The Examiner has indicated BS 256 is the “access node” in his rejection. Using this interpretation and referring to Fig. 9 of Sanmugam, clearly there is no exchanging paging information **between a plurality of access nodes** (i.e., BS 256). The only exchange of paging

information is between the BSs 256 and MSC 254. The Examiner has not addressed this argument from the prior response, but has merely recited the same art and rejection.

Applicants respectfully request that the Examiner respond to the foregoing arguments and show where Sanmugam actually teaches the claimed features, if the rejection is maintained.

Applicants respectfully submit that Miah as applied, even if properly combinable as alleged, (which Applicants do not admit), fails to cure the aforementioned deficiencies of Sanmugam. Likewise, the additional references, Palat, Wallentin, Laroia and Weber, as applied, do not cure the above-noted deficiencies of Sanmugam.

For at least the foregoing reasons it is respectfully submitted that claim 70 and independent claims 58-59, 81, 92, 103 and 104, which recite similar subject matter, are distinguishable over the applied art.

The remaining dependent claims are allowable at least by virtue of their dependency on the above-identified independent claims. See MPEP § 2143.01. Moreover, these claims recite additional subject matter, which is not suggested by the documents taken either alone or in combination.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections.

**CONCLUSION**

In light of the amendments contained herein, Applicant submits that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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By: /Raphael Freiwirth/  
Raphael Freiwirth, Reg. No. 52,918  
858.651.0777

QUALCOMM Incorporated  
Attn: Patent Department  
5775 Morehouse Drive  
San Diego, California 92121-1714  
Telephone: (858) 658-2426  
Facsimile: (858) 658-2502